

Page 1

May-17-12 11:52:03 AM

Item ID: D3531-3

Accept

N900040100

Setup Start *NS1*

Revision ID:

Item Name: Bracket Front Plate

Stop *NS2*

Start Date: 17/05/2012 **Start Qty:** 5.00

5

Cust Item ID:

Required Date: 31/05/2012 **Req'd Qty:** 5.00

5

Customer:

Reference:

Approvals: Process Plan: MLJ

Date: 12/05/22

Tooling:

Date:

Run Start *NR1*

QC:

Date:

SPC (Y/N):

Date:

Stop *NR2*

[illegible]

W/O: 84636

WORK ORDER CHANGES

| DATE | STEP | PROCEDURE CHANGE | By | Date | Qty | Approval Chief Eng / Prod Mgr | Approval QC Inspector |
|------|------|------------------|----|------|-----|-------------------------------------|--------------------------|
| | | | | | | | |
| | | | | | | | |

see PAR 12-198

Part No: D3531-3 PAR #: _____ Fault Category: Small Tabs NCR: Yes No DQA: Full Date: 12/06/16
 Resolution: Scrap Disposition: Scrap QA: N/C Closed: OK Date: 12/06/18

| NCR: 12-1479 | | WORK ORDER NON-CONFORMANCE (NCR) | | | | | | |
|--------------|------|--|-----------------------------|---|----------------|---------------------------|-----------------------|--------------------------|
| DATE | STEP | Description of NC Section A | Corrective Action Section B | | | Verification Section C | Approval Chief Eng | Approval QC Inspector |
| | | | Initial Chief Eng | Action Description Chief Eng | Sign & Date | | | |
| 12-05-23 | 110 | Grain Direction wrong. Not employee's fault, wasn't marked on Dwg. RC DESIGN. | S 17/06/01 057042 | Scrap + Replace with Grain running on 45° B# 121099 | SM 12-6-1 | S 17/06/01 | S 057042 | S 17/06/01 |
| | | | | | | | | |
| | | | | | | | | |

34 De x 5' 11030

NOTE: Date & initial all entries

May-17-12 11:52:03 AM

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Stop *NS2*

Start Date: 17/05/2012 **Start Qty:** 5.00

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Cust Item.ID:

Required Date: 31/05/2012 **Req'd Qty:** 5.00

5

Customer:

Reference:

Approvals: **Process Plan:** _____ **Date:** _____ **Tooling:** _____ **Date:** _____

Run Start *NR1*

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop ***NR2***

| Sequence ID/ Work Center ID | Operation Description | Set Up/ Run Hours | Tool ID | Tool # | Plan Code | Accept Qty | Reject Qty | Reject Number | Insp. Stamp |
|--------------------------------|--------------------------|----------------------|---------|--------|--------------|---------------|---------------|------------------|----------------|
|--------------------------------|--------------------------|----------------------|---------|--------|--------------|---------------|---------------|------------------|----------------|

130

130

Small Fab

Small Fab

Small Fab

Memo

Deburr if necessary.

0.00

0.00

140

140

Brake NC

Brake NC

NC BRAKE

Memo

Bend as per Dwg D3530

0.00

0.00

150

150

QC

Quality Control

QC5- Inspect part completeness to step on W/O

Memo

0.00

0.00

| W/O: | | WORK ORDER CHANGES | | | | | |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE | By | Date | Qty | Approval Chief Eng / Prod Mgr | Approval QC Inspector |
| | | | | | | | |
| | | | | | | | |

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

| NCR: | | WORK ORDER NON-CONFORMANCE (NCR) | | | | | | |
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NOTE: Date & initial all entries

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Item ID: D3531-3

Accept

N900040100

Setup Start *NS1*

Revision ID:

Item Name: Bracket Front Plate

Stop ***NS2***

Start Date: 17/05/2012 **Start Qty:** 5.00

5

Cust Item ID:

Required Date: 31/05/2012 **Req'd Qty:** 5.00

5

Customer:

Reference:

Approvals: **Process Plan:** _____ **Date:** _____ **Tooling:** _____ **Date:** _____

Run Start *NR1*

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop *NR2*

| Sequence ID/ Work Center ID | Operation Description | Set Up/ Run Hours | Tool ID | Tool # | Plan Code | Accept Qty | Reject Qty | Reject Number | Insp. Stamp |
|--------------------------------|--------------------------|----------------------|---------|--------|--------------|---------------|---------------|------------------|----------------|
|--------------------------------|--------------------------|----------------------|---------|--------|--------------|---------------|---------------|------------------|----------------|

160 Chemical Conversion Coat per QSI005 4.1

0.00

160

HandFinish

Memo

0.00

Hand Finishing

170 QC3- Inspect Part Finish

0.00

170

QC

Memo

0.00

Quality Control

180 Identify as per dwg & Stock Location:

0.00

180

Packaging

Memo

0.00

Packaging

| W/O: | | WORK ORDER CHANGES | | | | | |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE | By | Date | Qty | Approval Chief Eng / Prod Mgr | Approval QC Inspector |
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Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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NOTE: Date & initial all entries

Work Order ID 84636***84636***

Page 4

May-17-12 11:52:03 AM

Item ID: D3531-3

Accept

N900040100Setup Start ***NS1***

Revision ID:

Stop ***NS2***

Item Name: Bracket Front Plate

Start Date: 17/05/2012 Start Qty: 5.00

5

Cust Item ID:

Required Date: 31/05/2012 Req'd Qty: 5.00

5

Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Run Start ***NR1***

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop ***NR2***

| Sequence ID/ Work Center ID | Operation Description | Set Up/ Run Hours | Tool ID | Tool # | Plan Code | Accept Qty | Reject Qty | Reject Number | Insp. Stamp |
|--------------------------------|---|----------------------|---------|--------|--------------|---------------|---------------|------------------|----------------|
| 190 | QC21- Final Inspection - Work Order Release | 0.00 | | | | | | | |
| *190* | | | | | | | | | |
| QC | Memo | 0.00 | | | | | | | |
| Quality Control | | | | | | | | | |

12/6/05

ME
12-06-05

| W/O: | | WORK ORDER CHANGES | | | | | |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE | By | Date | Qty | Approval Chief Eng / Prod Mgr | Approval QC Inspector |
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Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

| NCR: | | WORK ORDER NON-CONFORMANCE (NCR) | | | | | | |
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| | | | Initial Chief Eng | Action Description Chief Eng | Sign & Date | | | |
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NOTE: Date & initial all entries

Picklist Print

May-17-12 11:52:06 AM

Page 1

Work Order ID: 84636

84636

Parent Item: D3531-3

D3531-3

Parent Item Name: Bracket Front Plate

Start Date: 17/05/2012

Required Date: 31/05/2012

Start Qty: 5.00

Required Qty: 5.00

Comments: IPP Rev:A New Issue 07-09-24 EC verified by DD

| Component Item ID/ Item Name | Replacement Item ID | Mfg/ Purch | Bin Item | Primary Location | Last Location | Route Seq ID | Unit of Measure | Qty on Hand | Qty per Kit | Total Qty | Qty Issued | Date Issued | Status |
|---------------------------------|------------------------|---------------|-------------|---------------------|------------------|-----------------|--------------------|----------------|-------------|--------------|---------------|----------------|--------|
|---------------------------------|------------------------|---------------|-------------|---------------------|------------------|-----------------|--------------------|----------------|-------------|--------------|---------------|----------------|--------|

M6061T6S.040

Purchased

No

100

sf

327.6778

0.1313

0.691053

M6061T6S 040

**

6061-T6 .040 Sheet

Location

Loc Qty

Loc Code

MAT021

327.6778

121030

71.5778

121099

256.1

121099

121099 Recvts

Jm
12-5-23

Jm
12-6-1

| W/O: | | WORK ORDER CHANGES | | | | | |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE | By | Date | Qty | Approval Chief Eng / Prod Mgr | Approval QC Inspector |
| | | | | | | | |
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Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

| NCR: | | WORK ORDER NON-CONFORMANCE (NCR) | | | | | | |
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| | | | Initial Chief Eng | Action Description Chief Eng | Sign & Date | | | |
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NOTE: Date & initial all entries

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|----------------------------------|--------|--------------|---------|
| DART AEROSPACE LTD | | Work Order: | 04636 |
| Description: Bracket Front Plate | | Part Number: | D3531-3 |
| Inspection Dwg: D3531 | Rev: A | Page 1 of 1 | |

FIRST ARTICLE INSPECTION CHECKLIST

☒ First Article ☐ Prototype

| Drawing Dimension | Tolerance | Actual Dimension | Accept | Reject | Method of Inspection | Comments |
|-------------------|---------------|------------------|--------|--------|----------------------|----------|
| Ø0.129 | +0.005/-0.001 | 0.132 | ✓ | | ✓ HB-02 | HB-02 |
| 3.72 | +/-0.030 | 3.717 | ✓ | | ✓ | HB-02 |
| 0.37 | +/-0.030 | 0.3605 | ✓ | | ✓ | HB-02 |
| 2.840 | +/-0.010 | 2.833 | ✓ | | ✓ | HB-02 |
| 0.88 | +/-0.030 | 0.886 | ✓ | | ✓ | HB-02 |
| 3.50 | +/-0.030 | 3.492 | ✓ | | ✓ | HB-02 |
| 4.67 | +/-0.030 | 4.660 | ✓ | | ✓ | HB-02 |
| Reuts. | | | | | | |
| Ø 0.129" | +0.005/-0.001 | 0.129" | ✓ | | ✓ | mm01 |
| 3.72" | ± 0.030 | 3.724" | ✓ | | ✓ | |
| 0.37" | ± 0.030 | 0.359" | ✓ | | ✓ | |
| 2.840" | ± 0.010 | 2.843" | ✓ | | ✓ | |
| 0.88" | ± 0.030 | 0.876" | ✓ | | ✓ | |
| 3.50" | ± 0.030 | 3.497" | ✓ | | ✓ | |
| 4.67" | ± 0.030 | 4.675" | ✓ | | ✓ | |
| 0.040 | ± 0.010 | 0.040" | | | | |
| Grain Direction | | | ✓ | | | |

| | | | | | |
|--------------|---------|-------------|----------|---------------------|-----|
| Measured by: | Jm | Audited by: | S | Prototype Approval: | N/A |
| Date: | 12-5-23 | Date: | 12/06/21 | Date: | N/A |

| Rev | Date | Change | Revised by | Approved |
|-----|----------|-----------|------------|----------|
| A | 07.10.15 | New Issue | KJ/EC/DD | DS |

Dart Aerospace Ltd

| W/O: | | WORK ORDER CHANGES | | | | | |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE | By | Date | Qty | Approval Chief Eng / Prod Mgr | Approval QC Inspector |
| | | | | | | | |
| | | | | | | | |

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

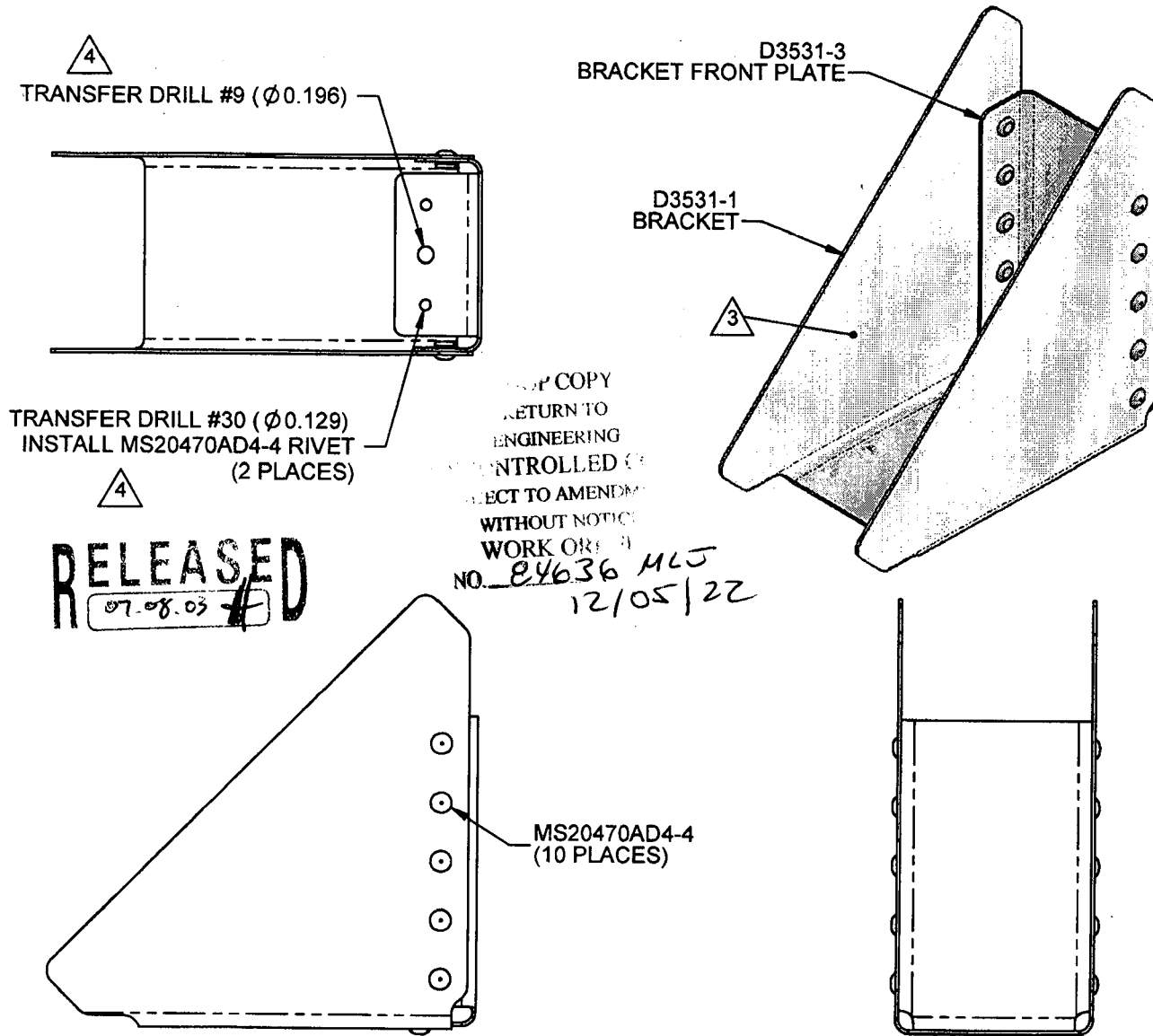
Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

| NCR: | | WORK ORDER NON-CONFORMANCE (NCR) | | | | | | |
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| | | | Initial Chief Eng | Action Description Chief Eng | Sign & Date | | | |
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NOTE: Date & initial all entries



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|------------------|---------------------------|---|------------------------|
| DESIGN CB | DRAWN BY CB | DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA | |
| CHECKED LE | APPROVED [Signature] | DRAWING NO. D3531 | REV. A SHEET 1 OF 3 |
| DATE 07.06.19 | TITLE BRACKET ASSEMBLY | | SCALE 1:2 |
| REV A | DATE 07.06.19 | DESCRIPTION NEW ISSUE | |



D3531-041 BRACKET ASSEMBLY

NOTES:

- 1) FINISH: POWDER COAT ASSEMBLY BLACK SANDTEX (4.3.5.7) PER DART QSI 005 4.3 ALL PARTS
- 2) ASSEMBLE PER DART QSI 003
- 3) IDENTIFY WITH DART P/N "D3531-041" USING WHITE MARKER ON INSIDE OF BRACKET ASSEMBLY, WHERE INDICATED
- 4) TRANSFER DRILL HOLES FROM D3531-1 BRACKET THROUGH D3531-3 BRACKET FRONT PLATE BEFORE FINISHING

PARTS LIST

| QTY. | P/N | DESCRIPTION |
|------|--------------|---------------------|
| X | D3531-041 | BRACKET ASSEMBLY |
| 1 | D3531-1 | BRACKET |
| 1 | D3531-3 | BRACKET FRONT PLATE |
| 12 | MS20470AD4-4 | RIVET |

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| W/O: | | WORK ORDER CHANGES | | | | | |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE | By | Date | Qty | Approval Chief Eng / Prod Mgr | Approval QC Inspector |
| | | | | | | | |
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Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

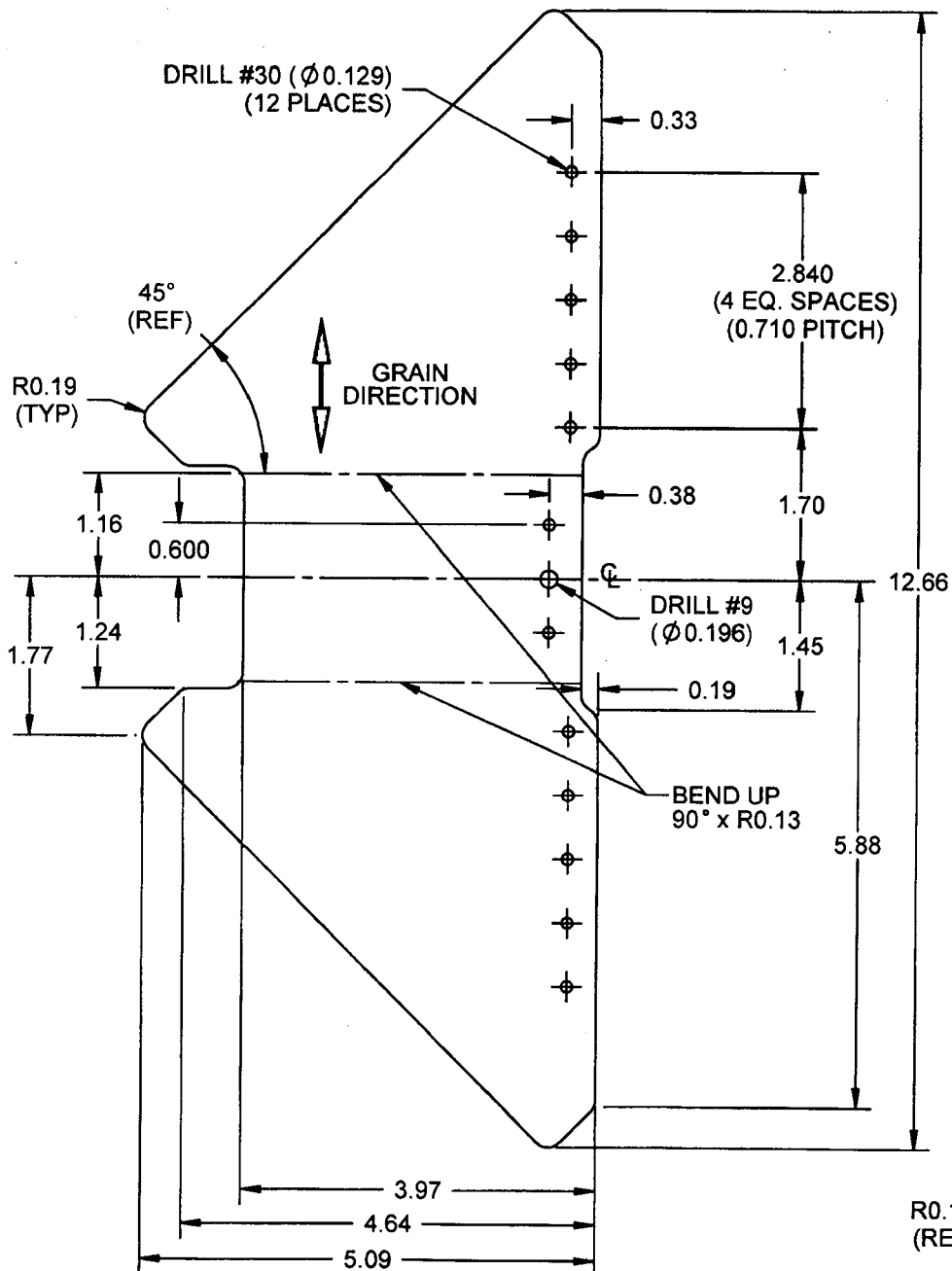
Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

| NCR: | | WORK ORDER NON-CONFORMANCE (NCR) | | | | | | |
|------|------|----------------------------------|--------------------------------|---------------------------------|----------------|---------------------------|-----------------------|--------------------------|
| DATE | STEP | Description of NC Section A | Corrective Action Section B | | | Verification Section C | Approval Chief Eng | Approval QC Inspector |
| | | | Initial Chief Eng | Action Description Chief Eng | Sign & Date | | | |
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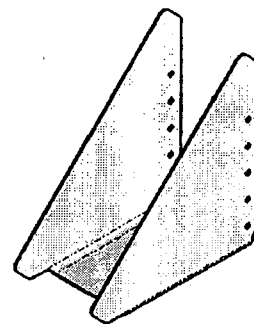
NOTE: Date & initial all entries



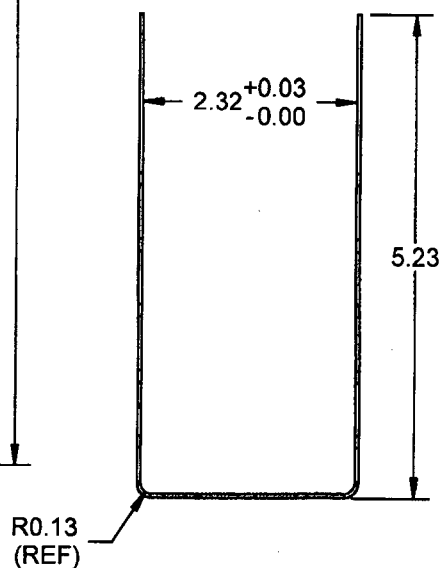
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| DESIGN CB | DRAWN BY CB | DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA | |
| CHECKED LE | APPROVED  | DRAWING NO. D3531 | REV. A SHEET 2 OF 3 |
| DATE 07.06.19 | | TITLE BRACKET ASSEMBLY | SCALE 1:2 |



D3531-1F FLAT PATTERN



RELEASED
07.08.03



D3531-1 BRACKET

NOTES:

- 1) MATERIAL: ALUMINUM 6061-T6/T62 SHEET, 0.040 THICK PER QQ-A-250/11 OR AMS 4025 OR AMS 4027 (REF DART SPEC M6061T6S.040)
- 2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED
- 5) BREAK ALL SHARP CORNERS TO 0.010 MAX
- 6) PART IS SYMMETRIC ABOUT ϕ

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24636

| W/O: | | WORK ORDER CHANGES | | | | | |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE | By | Date | Qty | Approval Chief Eng / Prod Mgr | Approval QC Inspector |
| | | | | | | | |
| | | | | | | | |

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

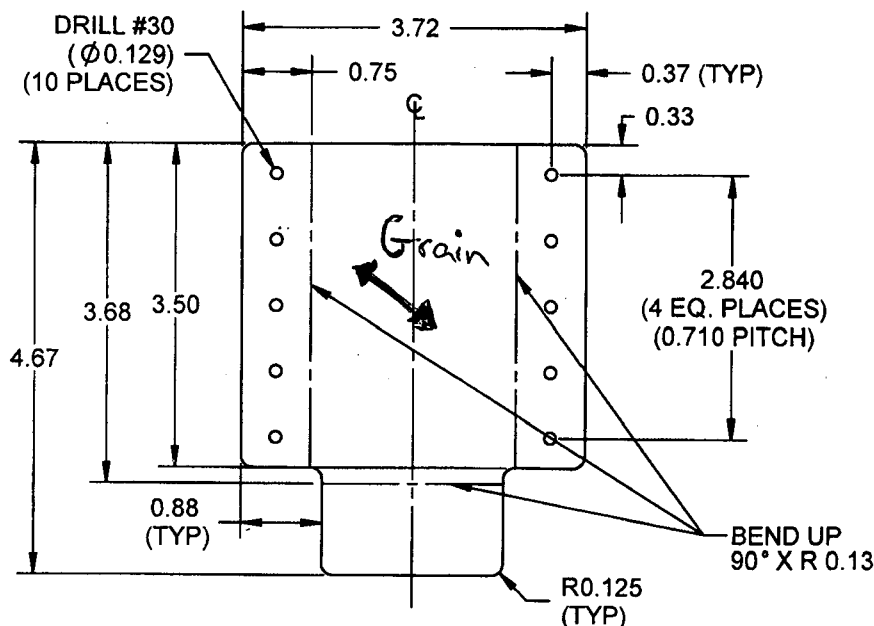
Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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NOTE: Date & initial all entries

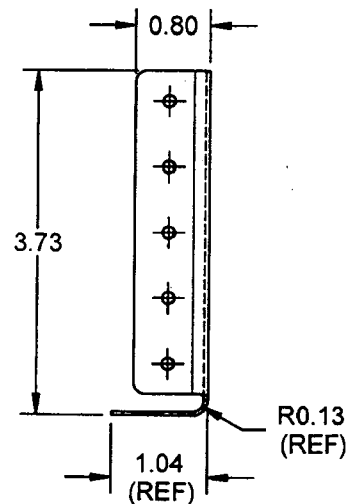
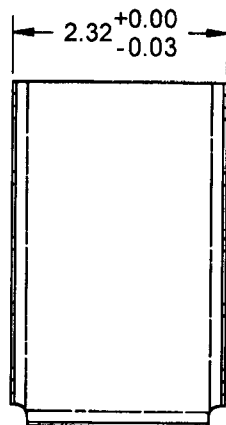
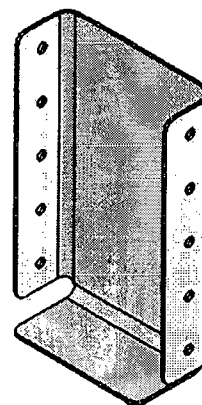


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| DESIGN CB | DRAWN BY CB | DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA | |
| CHECKED LE | APPROVED # | DRAWING NO. D3531 | REV. A SHEET 3 OF 3 |
| DATE 07.06.19 | TITLE BRACKET ASSEMBLY | | SCALE 1:2 |



D3531-3F FLAT PATTERN

RELEASED
07.08.03 #



D3531-3 BRACKET FRONT PLATE

NOTES:

- 1) MATERIAL: ALUMINUM 6061-T6/T62 SHEET, 0.040 THICK PER QQ-A-250/11 OR AMS 4025 OR AMS 4027 (REF DART SPEC M6061T6S.040)
- 2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED
- 5) BREAK ALL SHARP CORNERS TO 0.010 MAX
- 6) PART IS SYMMETRIC ABOUT ϕ

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